

# MINNESOTA DEPARTMENT OF TRANSPORTATION SHERBURNE COUNTY

## PLAN SYMBOLS

EXIST. UTILITIES (ELEC.)	— Elec —
EXIST. UTILITIES (GAS)	— Gas —
EXIST. UTILITIES (PHONE)	— Phone —
EXIST. UTILITIES (PHONE)	— Fiber —
EXIST. PAVEMENT EDGE	_____
RIGHT OF WAY	_____
PROP. PAVEMENT EDGE	_____
CENTERLINE	—+—+—+—
FIELD FENCE	—x—x—x—
CONSTRUCTION LIMITS	_____
CULVERT	—+—+—+—
PROPERTY LINE	_____
SLOPE/TEMP. EASEMENT	_____
DRAINAGE/UTILITY EASEMENT	_____
WETLAND AREA	_____
SILT FENCE	_____
TREE LINE	_____
PINE TREE	⊕
DECIDUOUS TREE	⊙
SHRUB/BUSH	⊗
POWER POLE	⊕
TELEPHONE PED.	⊗
FIBER OPTIC	⊙
GAS RISER	⊕
MANHOLE	⊙
MAILBOX/911 NUMBER	⊕
SOIL BORINGS	⊕
GATE VALVE	⊕

## SCALES

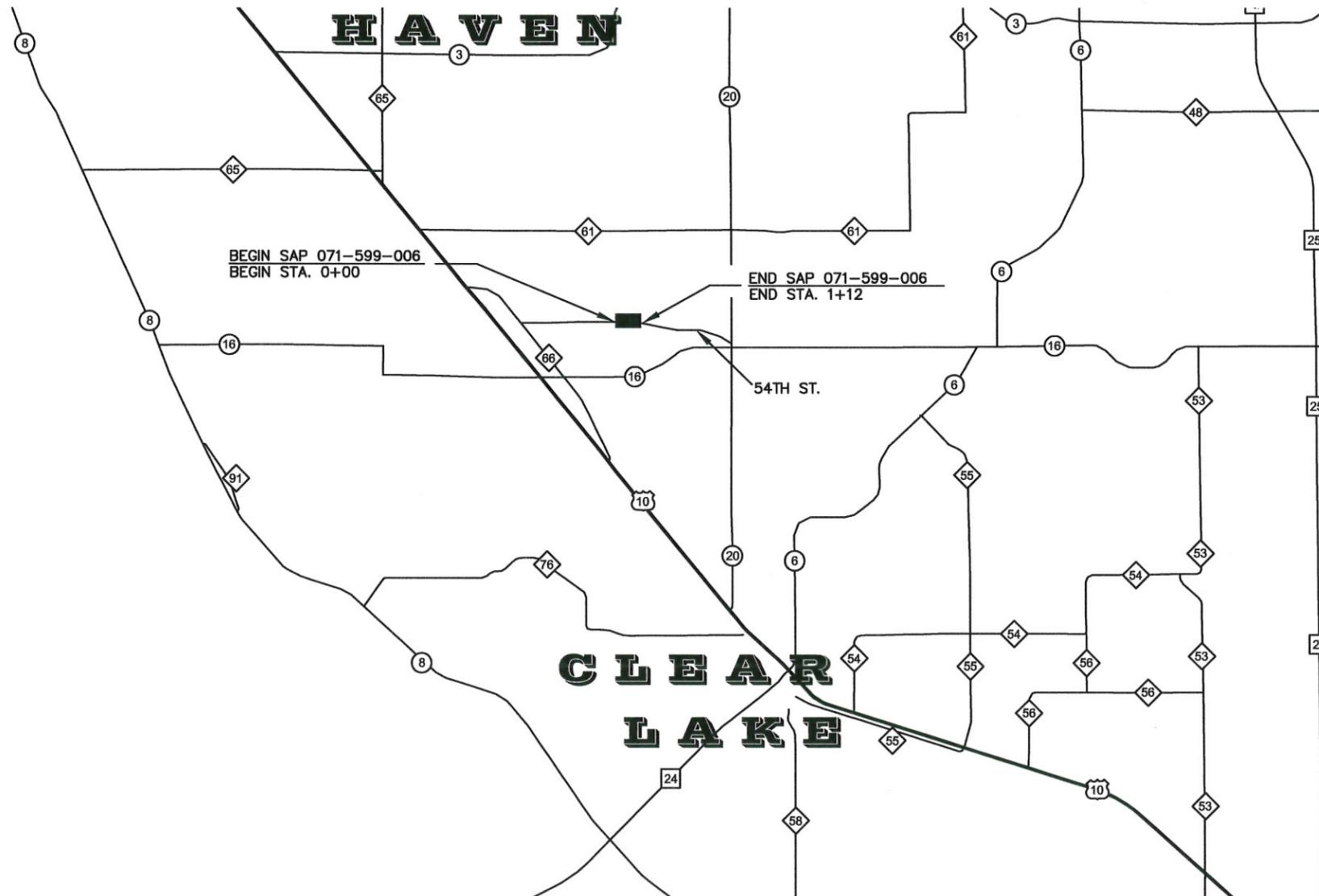
INDEX MAP	8000'
PLAN	50'
PROFILE	HORIZ. 10'
	VERT. 10'

CONSTRUCTION PLAN FOR DEMOLITION OF BRIDGE #90706  
LOCATED ON 54TH STREET (HAVEN TOWNSHIP) OVER THE ELK RIVER

### LEGAL DESCRIPTION:

SW 1/4 OF THE SW 1/4  
SEC. 25, T35N, R30W.

GROSS LENGTH	112	ft.	0.021	miles
BRIDGES—LENGTH	82	ft.	0.016	miles
EXCEPTIONS—LENGTH	NA	ft.	NA	miles
NET LENGTH	112	ft.	0.021	miles



## GOVERNING SPECIFICATIONS

THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL FOR THE TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

## INDEX OF SHEETS

SHEET	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES/CONST. NOTES/STANDARD PLATES
3-7	DETAILS
8-9	SWPPP
10	REMOVALS
11	FINAL RESTORATION
12	AERIAL

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Rhonda F. Lewis*  
RHONDA F. LEWIS SHERBURNE COUNTY ENGINEER

DATE: 9/26/14 REG. NO. 24022

DATE: \_\_\_\_\_

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY.

DATE: \_\_\_\_\_

STATE AID ENGINEER: APPROVED FOR STATE AID.

SHERBURNE COUNTY  
PUBLIC WORKS  
425 JACKSON AVE.  
ELK RIVER, MN 55330



MnDOT DISTRICT: 3

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THE PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: \_\_\_\_\_ REG. NO. 24022

NOTE	ITEM NUMBER	DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY
	2021.501	MOBILIZATION	LS	1
1	2101.511	CLEARING AND GRUBBING	LS	1
	2104.501	REMOVE BARBED WIRE FENCE	LF	50
1	2104.523	SALVAGE BOULDER	EACH	2
1	2104.523	SALVAGE SIGN	EACH	10
1	2105.501	COMMON EXCAVATION (EV)	CU YD	150
	2442.501	REMOVE EXISTING BRIDGE	LS	1
1, 2	2511.501	RANDOM RIPRAP CLASS III	CY	150
1	2511.515	GEOTEXTILE FILTER TYPE IV (MOD)	SY	290
	2557.501	WIRE FENCE DESIGN, BARBED WIRE	LF	70
	2557.603	INSTALL BARBED WIRE FENCE	LF	70
	2563.601	TRAFFIC CONTROL	LS	1
	2573.502	SILT FENCE, TYPE HI	LF	110
	2573.505	FLOTATION SILT CURTAIN TYPE LIGHT DUTY	LF	125
1	2575.602	SITE RESTORATION	EACH	1

- |    |                        |
|----|------------------------|
| 1) | SEE SPECIAL PROVISIONS |
| 2) | SHALL BE 100% CRUSHED  |

**CONSTRUCTION NOTES :**

WITHIN THE PLAN WHEREVER THE WORD INCIDENTAL IS USED IT SHALL MEAN NO DIRECT PAYMENT WILL BE MADE FOR THAT ITEM.

EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT LIMITS. THIS WORK IS INCIDENTAL TO THE CONTRACT. ANY ROCK OR CONSTRUCTION DEBRIS ENCOUNTERED FOR THIS PROJECT SHALL BE CONSIDERED COMMON EXCAVATION ITEM (2105.501) AND PAID FOR AT THE UNIT BID PRICE.

ALL EROSION CONTROL MEASURES SHALL CONFORM WITH THE SPECIAL PROVISIONS AND THE NPDES PERMIT AS IT APPLIES TO THIS PROJECT.

THE CONTRACTOR IS HEREBY REMINDED OF THEIR RESPONSIBILITY UNDER THE STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. CONTACT MUST BE MADE THROUGH GOPHER STATE ONE-CALL.

EXTREME CARE SHALL BE TAKEN SO THAT EXISTING TREES SHOWN OUTSIDE THE CONSTRUCTION LIMITS ARE NOT REMOVED OR DAMAGED. ANY TREES THAT ARE REMOVED OR DAMAGED WILL BE REPLACED AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INPLACE EROSION CONTROLS METHODS.

THE FOLLOWING STANDARD PLATES APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

MnDOT STANDARD PLATES	
PLATE NO.	DESCRIPTION
8000 I	STANDARD BARRICADES

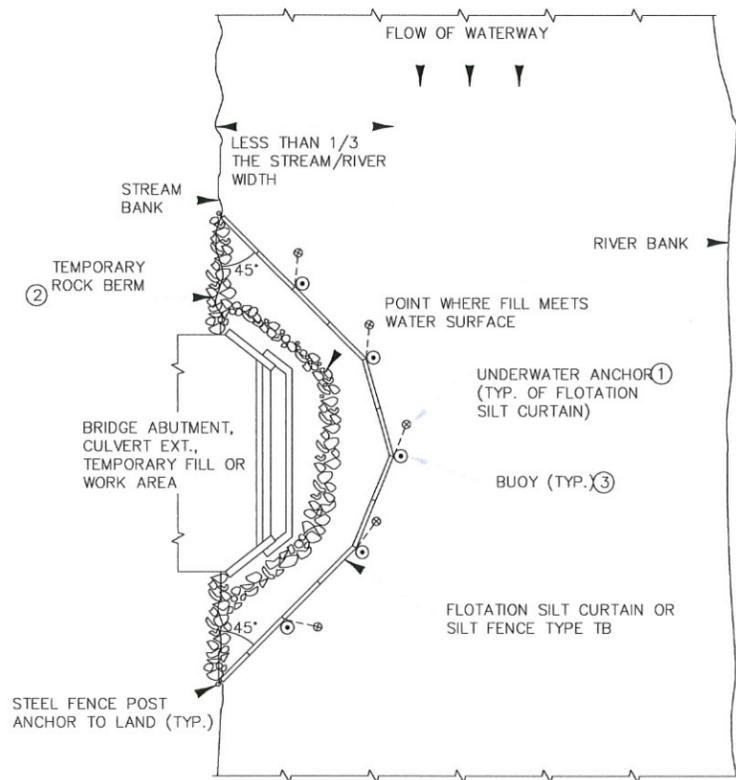


SHERBURNE COUNTY PUBLIC WORKS  
 425 JACKSON AVE. ELK RIVER, MINNESOTA 55330  
 Phone (763) 765-3300

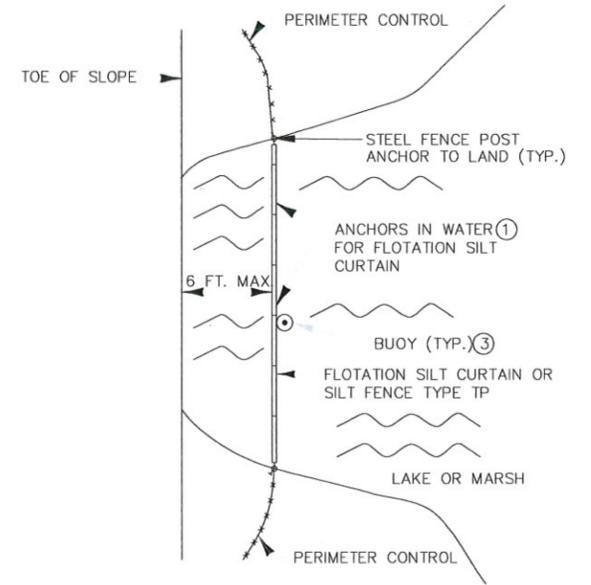
DATE	REVISION

DESIGN BY: MLS  
 CHECKED BY: DMK  
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 Date: 9/24/14  
 Lic. No. 24022

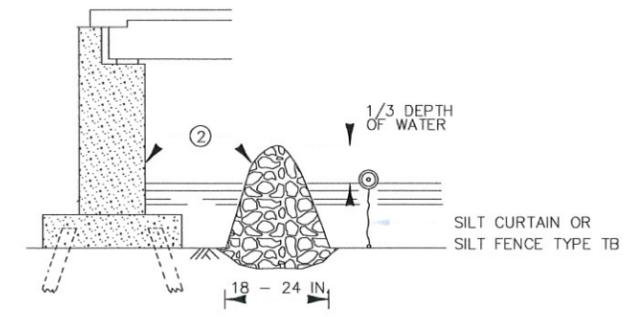
**BRIDGE 90706 REMOVAL**  
 ESTIMATED QUANTITIES



PLAN VIEW FOR STREAM ⑤



PLAN VIEW FOR LAKE OR MARSH ⑤

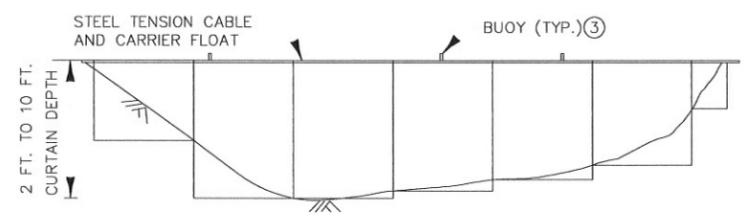


TEMPORARY ROCK BERM FOR SEDIMENT CONTROL

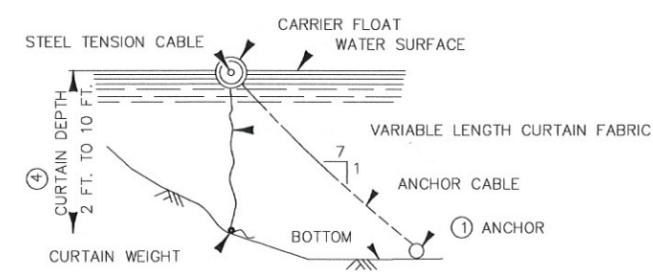
INSTALLATION GUIDELINES  
SILT FENCE TYPE TB  
MINIMUM WATER DEPTH: 1 FT.  
MAXIMUM WATER DEPTH: 3 FT.  
MAXIMUM WATER VELOCITY: 5 FT./SEC.

INSTALLATION GUIDELINES ④  
FLOTATION SILT CURTAIN  
TYPE: STILL WATER  
MINIMUM WATER DEPTH: 3 FT.  
MAXIMUM WATER DEPTH: 10 FT.  
MAXIMUM WATER VELOCITY: 2 FT./SEC.  
MAXIMUM WAVE HEIGHT: 1 FT

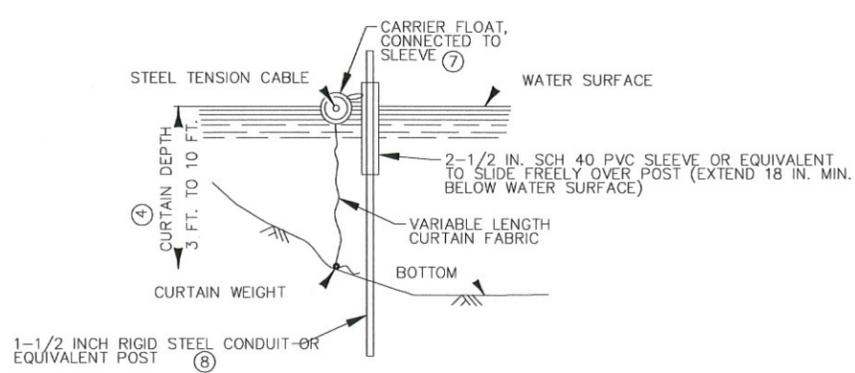
INSTALLATION GUIDELINES ④  
FLOTATION SILT CURTAIN  
TYPE: MOVING WATER  
MINIMUM WATER DEPTH: 3 FT.  
MAXIMUM WATER DEPTH: 10 FT.  
MAXIMUM WATER VELOCITY: 5 FT./SEC.  
MAXIMUM WAVE HEIGHT: 2 FT.



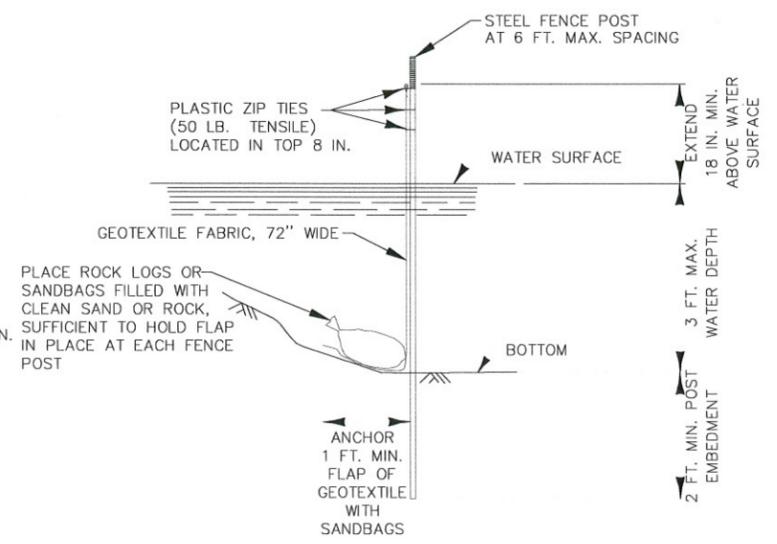
FRONT VIEW FOR FLOTATION SILT CURTAIN



FLOTATION SILT CURTAIN



ALTERNATE FLOTATION SILT CURTAIN



SILT FENCE TYPE TB ⑥

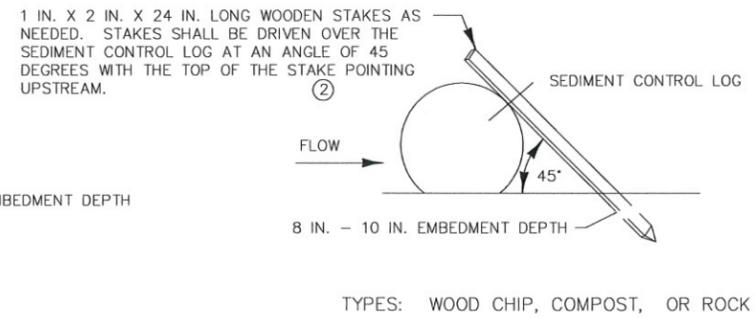
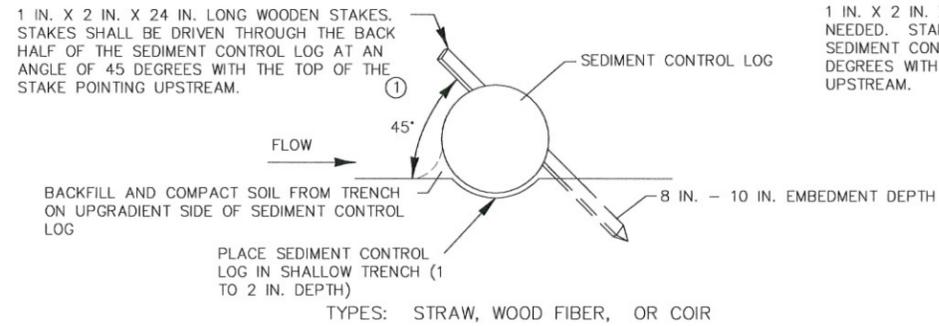
NOTES:

- SEE SPECS. 2573, 3886, 3887 & 3893.
- ① FOR ANCHOR SPACING AND WEIGHT REQUIREMENTS, SEE SPEC. 2573.
- ② IN AREAS WHERE THE PLAN CALLS FOR RIPRAP AT A BRIDGE, CULVERT, OR SLOPE, A TEMPORARY ROCK BERM CONSTRUCTED FROM THE RIPRAP CAN BE USED TO PROVIDE ADDITIONAL PROTECTION. WHEN THE WORK IS COMPLETE THE RIPRAP CAN THEN BE MOVED TO THE PERMANENT LOCATION INDICATED IN THE PLANS. THE TEMPORARY ROCK BERM IS INCIDENTAL.
- ③ ON U.S. COAST GUARD OR OTHER MOTORIZED WATERWAYS, BUOYS ARE REQUIRED TO MARK THE ENDS AND SPECIAL AREAS FOR VISIBILITY. PLACE BUOYS AS REQUIRED FOR NAVIGATIONAL PURPOSES.
- ④ MINIMUM WATER DEPTH APPLIES TO THE DEEPEST POINT ALONG THE FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB FOR DETERMINING APPLICABILITY OF FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB.
- ⑤ SILT CURTAIN SHOULD BE REMOVED WHEN THE AREA CONTRIBUTING DIRECT RUNOFF HAS BEEN TEMPORARILY OR PERMANENTLY STABILIZED. SILT CURTAIN SHOULD ALSO BE REMOVED BEFORE WINTER IF ICE UP OR ICE FLOW IS ANTICIPATED.
- ⑥ EMBED POST INTO BOTTOM A MINIMUM OF 40% OF THE WATER DEPTH (INCLUDING WAVE HEIGHT), BUT IN NO CASE SHALL EMBEDMENT BE LESS THAN 2 FEET.
- ⑦ ANCHOR FLOAT MUST BE CONNECTED SECURELY TO SLEEVE WITH A MINIMUM TENSILE STRENGTH OF 100 LBS. CONNECTION METHOD MUST ALLOW FOR SLEEVE TO MOVE FREELY ON POST.
- ⑧ PROVIDE SUFFICIENT NUMBER OF POST ANCHORS TO MAINTAIN SILT CURTAIN POSITION.

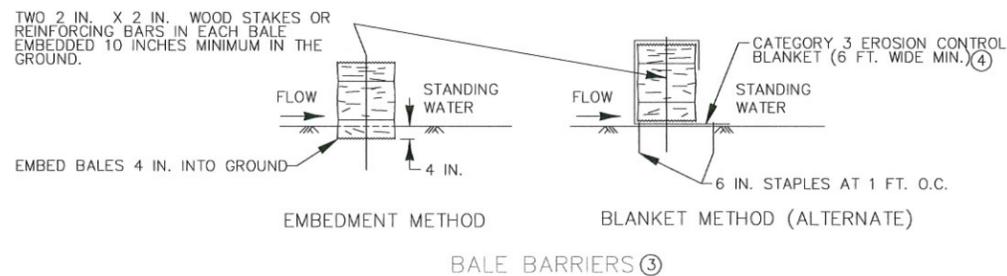
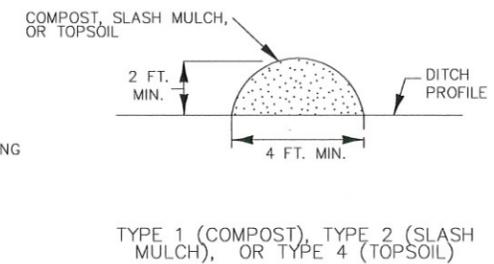
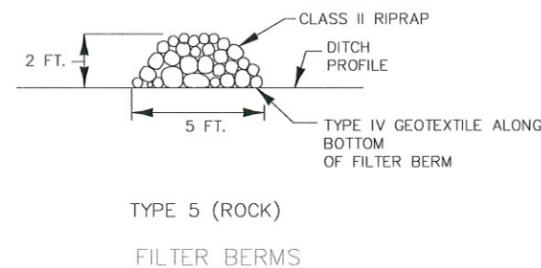
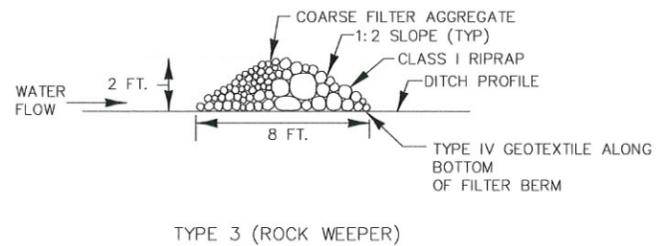
STANDARD SHEET NO.  
5-297.405 ( 1 OF 7 )  
STANDARD APPROVED:  
DECEMBER 11, 2013

TEMPORARY SEDIMENT CONTROL  
SILT CURTAIN OR SILT FENCE TYPE TB

DATE	REVISION	DESIGN BY:
		MLS
		CHECKED BY:
		DMK



Sediment CONTROL logS



NOTES:

SEE SPECS. 2573, 3149, 3874, 3882, 3886, & 3897.

- ① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.
- ② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.
- ③ TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6 INCH MAX. DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14 IN. X 18 IN. X 36 IN. LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.
- ④ INSTEAD OF TRENCHING, PLACE BALE ON THE BLANKET AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.

STANDARD SHEET NO.  
5-297.405 (2 OF 7)  
STANDARD APPROVED:  
DECEMBER 11, 2013

TEMPORARY SEDIMENT CONTROL  
FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS



SHERBURNE COUNTY PUBLIC WORKS

425 JACKSON AVE. ELK RIVER, MINNESOTA 55330

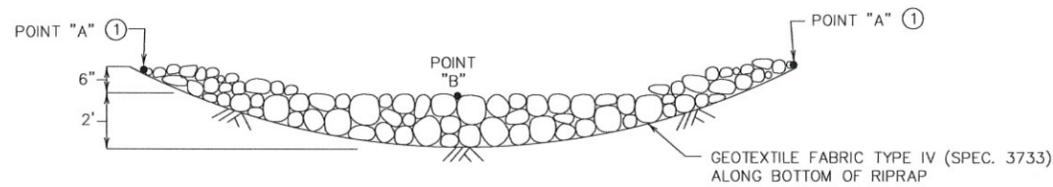
Phone (763) 765-3300

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		DMK

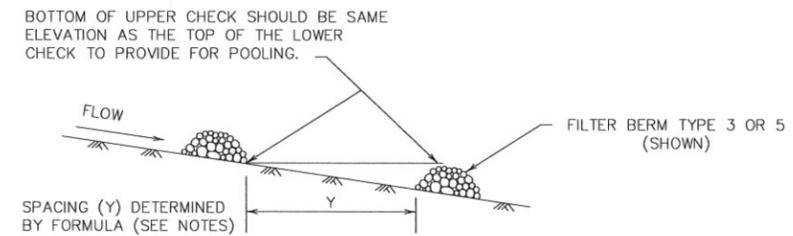
BRIDGE 90706 REMOVAL  
MNDOT STANDARD PLANS

SAP 071-599-006

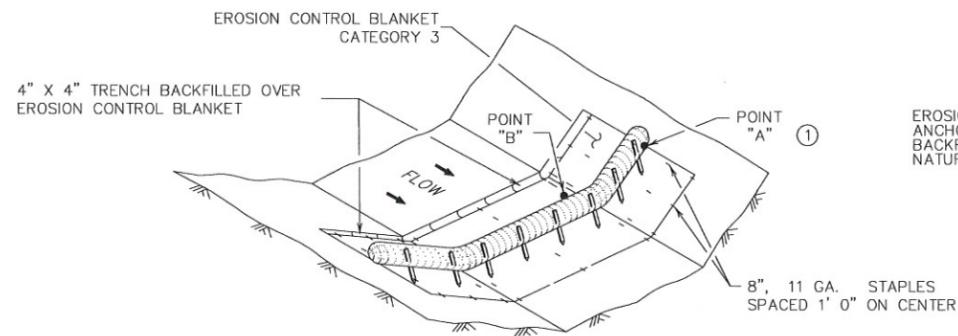
SHEET NO. 4 OF 12 SHEETS •



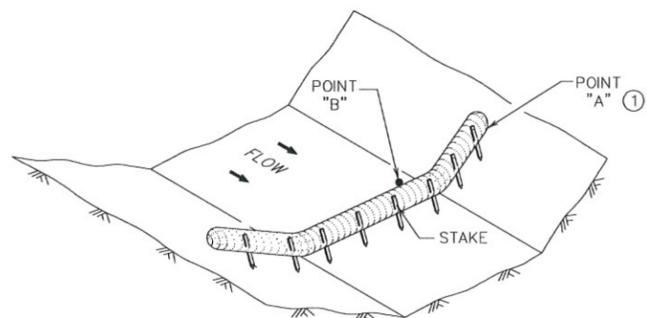
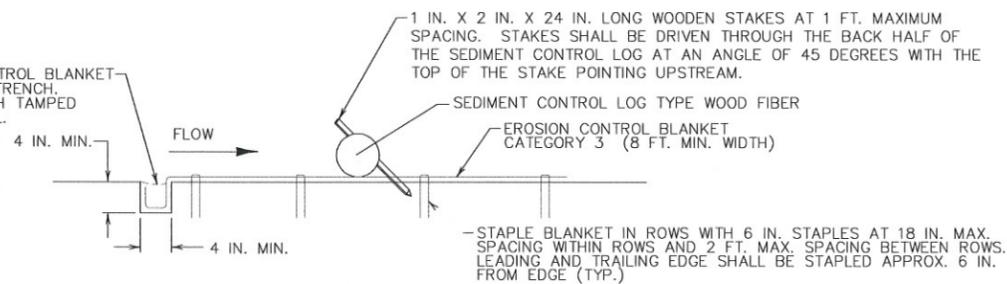
ROCK DITCH CHECKS  
 FILTER BERMS TYPE 3 (ROCK WEEPER) OR FILTER TYPE 5 (ROCK) ②③  
 (FOR USE ON ROUGH GRADED AREAS)



DITCH CHECK SPACING  
 (FOR ALL FILTER BERM TYPES)



SEDIMENT CONTROL LOG TYPE BLANKET SYSTEM ④



SEDIMENT CONTROL LOG TYPE WOOD FIBER, OR TYPE COMPOST ⑤  
 (FOR USE ON ROUGH GRADED AREAS)

NOTES:

SEE SPECS. 2573, 3601, 3733, 3885, 3886 & 3889.

FOR DITCH CHECKS, PLACE SEDIMENT CONTROL LOG PERPENDICULAR TO FLOW AND IN A CRESCENT SHAPE WITH THE ENDS FACING UPSTREAM.

APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:

$$\text{APPROXIMATE SPACING OF DITCH CHECKS (FT.)} = Y = \frac{\text{DITCH CHECK HEIGHT (FT)}}{\% \text{ CHANNEL SLOPE}} \times 100$$

① POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

② PERMANENT ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:6 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

③ DITCH GRADE 3% - 5%, MAX. FLOW VELOCITY 12 FT./SEC..

④ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 4.5 FT./SEC..

⑤ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 1.5 FT./SEC..

STANDARD SHEET NO. 5-297.405 ( 3 OF 7 )
STANDARD APPROVED: DECEMBER 11, 2013

TEMPORARY SEDIMENT CONTROL  
 DITCH CHECK



SHERBURNE COUNTY PUBLIC WORKS

425 JACKSON AVE. ELK RIVER, MINNESOTA 55330

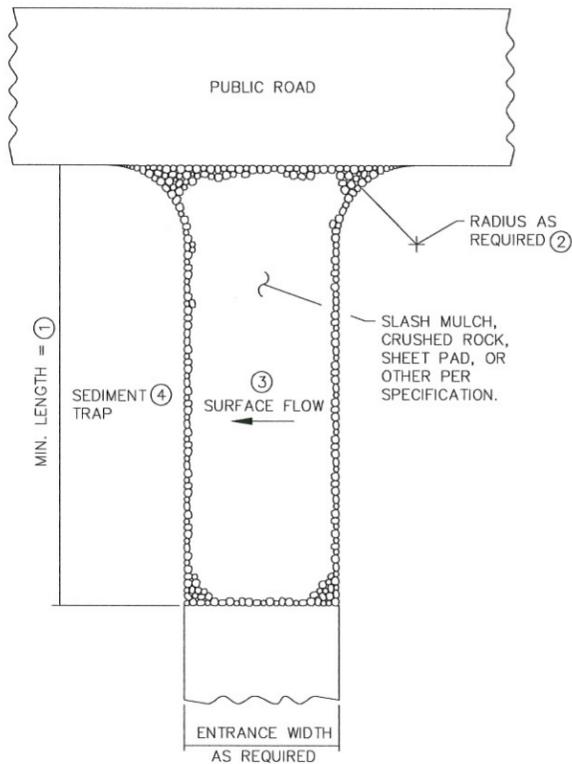
Phone (763) 765-3300

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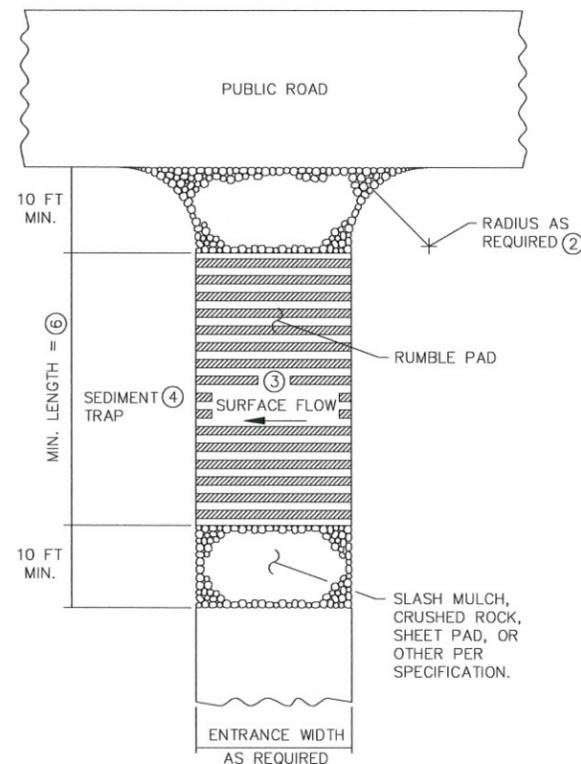
BRIDGE 90706 REMOVAL  
 MNDOT STANDARD PLANS

SAP 071-599-006

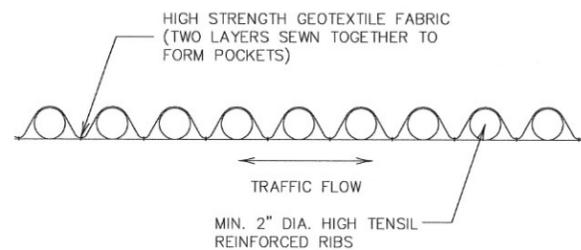
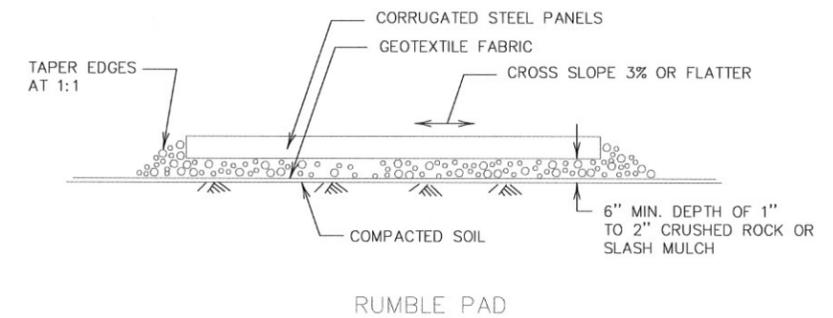
SHEET NO. 5 OF 12 SHEETS



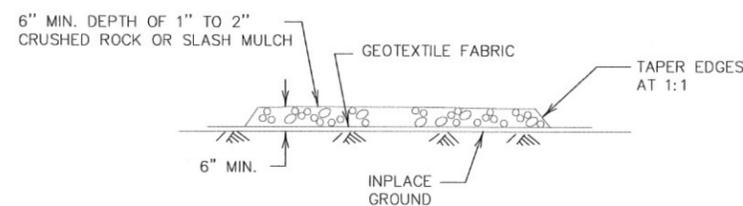
SLASH MULCH, CRUSHED ROCK, OR SHEET PAD CONSTRUCTION EXIT ⑤⑦



RUMBLE PAD CONSTRUCTION EXIT ⑤⑦



SHEET PAD



SLASH MULCH OR CRUSHED ROCK

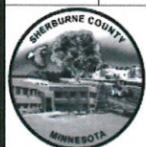
NOTES:

SEE SPECS. 2573 & 3882.

- ① MINIMUM LENGTH SHALL BE THE GREATER OF 50 FEET OR A LENGTH SUFFICIENT TO ALLOW A MINIMUM OF 5 TIRE ROTATIONS ON THE PROVIDED PAD. MINIMUM LENGTH SHALL BE CALCULATED USING THE LARGEST TIRE WHICH WILL BE USED IN TYPICAL OPERATIONS.
- ② PROVIDE RADIUS OR WIDEN PAD SUFFICIENTLY TO PREVENT VEHICLE TIRES FROM TRACKING OFF OF PAD WHEN LEAVING SITE.
- ③ IF RUNOFF FROM DISTURBED AREAS FLOWS TOWARD CONSTRUCTION EXITS, PREVENT RUNOFF FROM DRAINING DIRECTLY TO PUBLIC ROAD OVER CONSTRUCTION EXIT BY CROWNING THE EXIT OR SLOPING TO ONE SIDE. IF SURFACE GRADING IS INSUFFICIENT, PROVIDE OTHER MEANS OF INTERCEPTING RUNOFF.
- ④ IF RUNOFF FROM CONSTRUCTION EXITS WILL DRAIN OFF OF PROJECT SITE, PROVIDE SEDIMENT TRAP WITH STABILIZED OVERFLOW.
- ⑤ IF A TIRE WASH OFF IS REQUIRED THE CONSTRUCTION EXITS SHALL BE GRADED TO DRAIN THE WASH WATER TO A SEDIMENT TRAP.
- ⑥ MINIMUM LENGTH OF RUMBLE PAD SHALL BE 20 FEET, OR AS REQUIRED TO REMOVE SEDIMENT FROM TIRES. IF SIGNIFICANT SEDIMENT IS TRACKED FROM THE SITE, THE RUMBLE PAD SHALL BE LENGTHENED OR THE DESIGN MODIFIED TO PROVIDE ADDITIONAL VIBRATION. WASH-OFF LENGTH SHALL BE AS REQUIRED TO EFFECTIVELY REMOVE CONSTRUCTION SEDIMENT FROM VEHICLE TIRES.
- ⑦ MAINTENANCE OF CONSTRUCTION EXITS SHALL OCCUR WHEN THE EFFECTIVENESS OF SEDIMENT REMOVAL HAS BEEN REDUCED. MAINTENANCE SHALL CONSIST OF REMOVING SEDIMENT AND CLEANING THE MATERIALS OR PLACING ADDITIONAL MATERIAL (SLASH MULCH OR CRUSHED ROCK) OVER SEDIMENT FILLED MATERIAL TO RESTORE EFFECTIVENESS.

STANDARD SHEET NO.  
5-297.405 (5 OF 7)  
STANDARD APPROVED:  
DECEMBER 11, 2013

TEMPORARY SEDIMENT CONTROL  
CONSTRUCTION EXITS



SHERBURNE COUNTY PUBLIC WORKS

425 JACKSON AVE. ELK RIVER, MINNESOTA 55330

Phone (763) 765-3300

DATE	REVISION

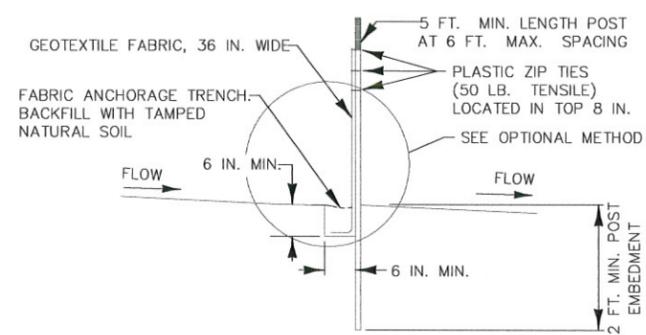
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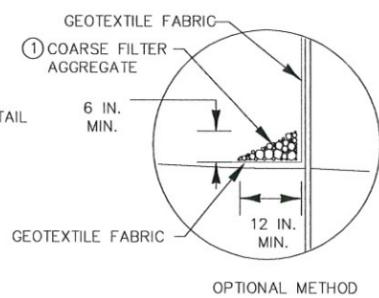
BRIDGE 90706 REMOVAL  
MNDOT STANDARD PLANS

SAP 071-599-006

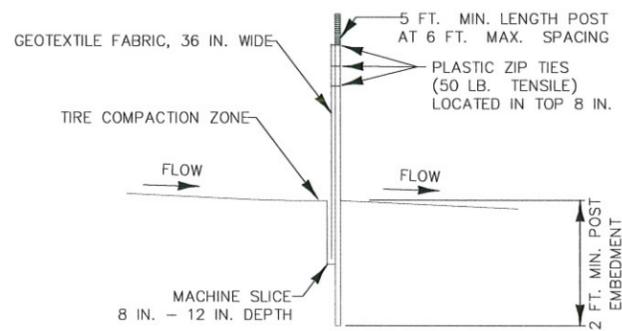
SHEET NO. 6 OF 12 SHEETS



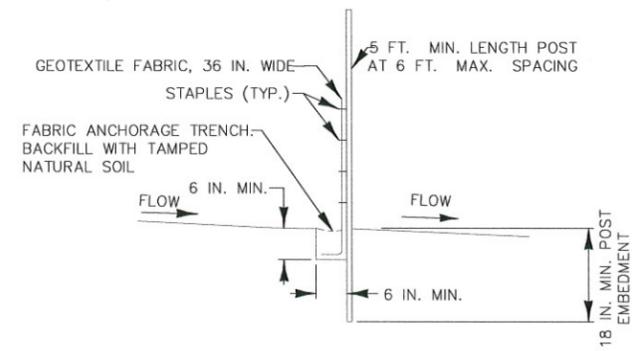
SILT FENCE TYPE HI ②  
(HAND INSTALLED)



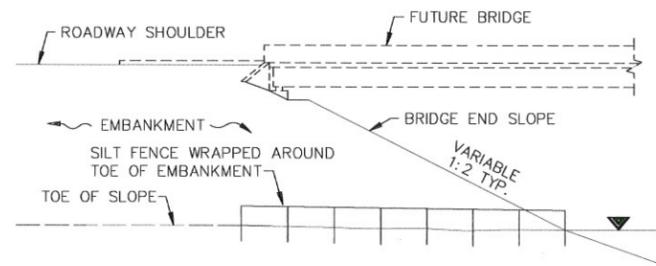
OPTIONAL METHOD



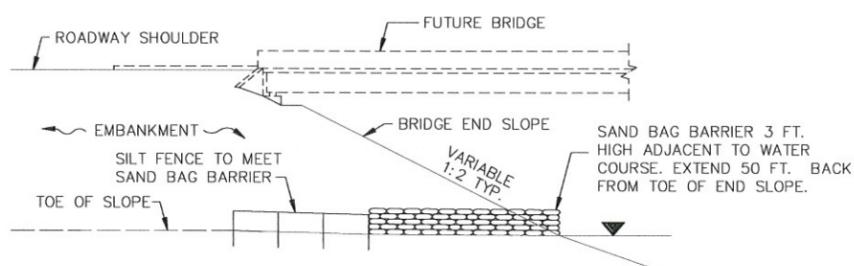
SILT FENCE TYPE MS ②  
(MACHINE SLICED)



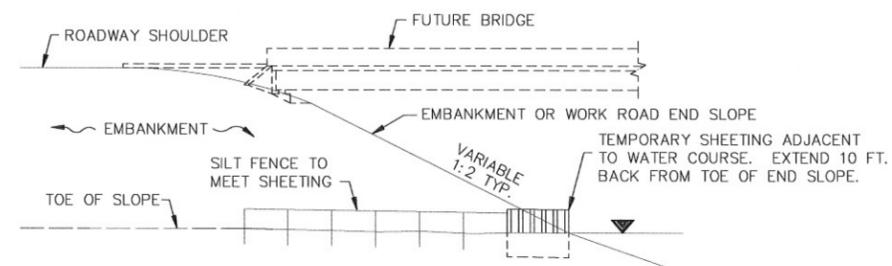
SILT FENCE TYPE PA ③  
(PREASSEMBLED)



SILT FENCE ONLY ④

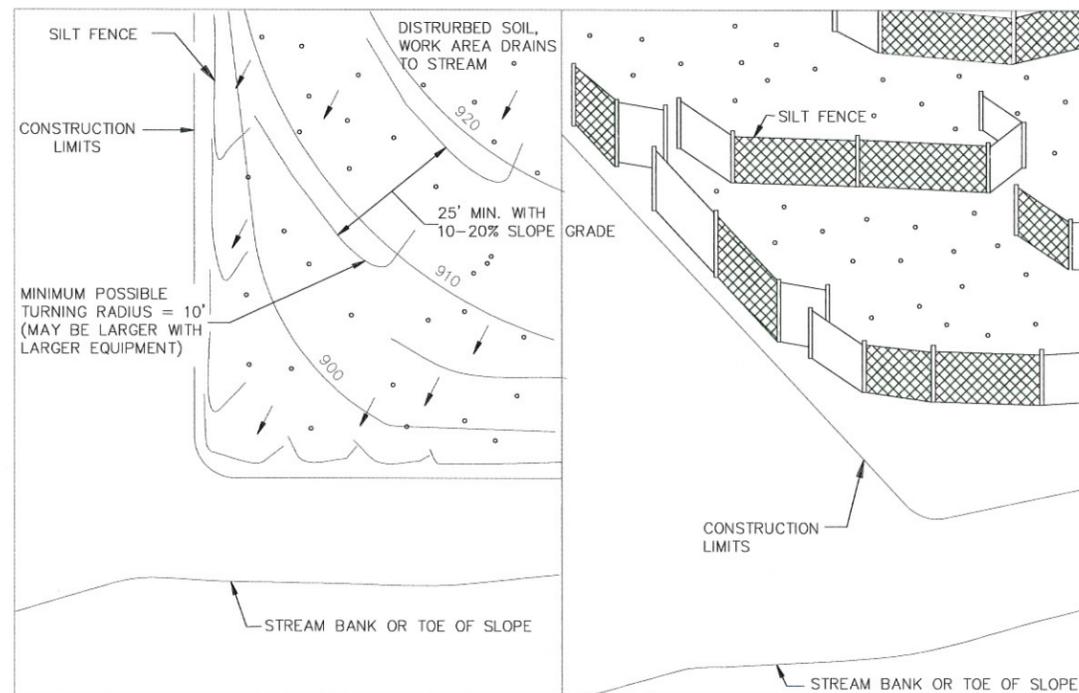


SILT FENCE WITH SAND BAGS ⑤



SILT FENCE WITH SHEETING ⑥

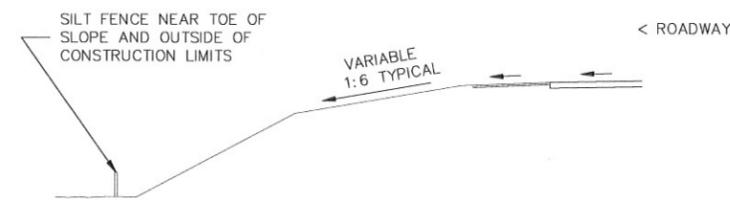
INSTALLATION AT BRIDGE EMBANKMENT ADJACENT TO WATER



PLAN VIEW

PERSPECTIVE VIEW

J-HOOK INSTALLATION



LOCATION AT TOE OF ROADWAY EMBANKMENT

NOTES:  
SEE SPECS. 2573, 3149 & 3886.

- ① COARSE FILTER AGGREGATE (SPEC. 3149) SHALL BE INCIDENTAL.
- ② TO PROTECT AREAS FROM SHEET FLOW. MAXIMUM CONTRIBUTING AREA: 1 ACRE.
- ③ TO PROTECT AREAS FROM SHEET FLOW. MAXIMUM CONTRIBUTING AREA: 0.25 ACRE.
- ④ WATER COURSE FLOW VELOCITY: STANDING. CONTRIBUTING SLOPE AREA: 1/2 ACRE.
- ⑤ WATER COURSE FLOW VELOCITY: 1 TO 7 FT./SEC. CONTRIBUTING SLOPE AREA: 1 ACRE.
- ⑥ WATER COURSE FLOW VELOCITY: 8 TO 15 FT./SEC. CONTRIBUTING SLOPE AREA: 3 ACRES.

STANDARD SHEET NO.  
5-297.405 (6 OF 7)  
STANDARD APPROVED:  
DECEMBER 11, 2013

TEMPORARY SEDIMENT CONTROL  
SILT FENCE



SHERBURNE COUNTY PUBLIC WORKS

425 JACKSON AVE. ELK RIVER, MINNESOTA 55330

Phone (763) 765-3300

DATE	REVISION

DESIGN BY:  
MLS

CHECKED BY:  
DMK

BRIDGE 90706 REMOVAL  
MNDOT STANDARD PLANS

SAP 071-599-006

SHEET NO. 7 OF 12 SHEETS

PROJECT DESCRIPTION

SAP 071-599-006 will remove Bridge 90706 over the Elk River on 54th St. (Haven Township) in Sherburne County, MN. The project will consist of removing the existing steel truss bridge, concrete wingwalls and abutments, regrading disturbed embankments to natural channel slopes. All work will be confined to the existing right of way of 54th Street.

LAND FEATURE CHANGES

Total project area disturbed= 0.10 Acres.  
 Total existing impervious surfaces= 0.0 Acres.  
 Total proposed impervious surface= 0.0 Acres.

ENVIRONMENTALLY SENSITIVE AREAS

Local wetlands exist adjacent to the project. Widening the road will place minimal fill material in these wetlands.

There are no "Calcareous Fens" located within the project limits.

TIMING OF BMP INSTALLATION

The erosion prevention and sediment control BMP's shall be installed as necessary to minimize erosion from disturbed surfaces and capture sediment on site, and shall meet the NPDES permit part IV construction activity requirements.

PROJECT CONTACTS

MPCA	Paul Estuesta	218-302-6608
MPCA (Environmental Emergencies)	Bill Bronder	800-422-0798
SWCD	Roger Stradal	763-241-1170
DNR	Roger Stradal	320-255-4279
USACE	Andrew Beaudet	651-290-5642
County	Lynn Waytashek	763-765-4461
SWPPP Design	Dan Knapek	763-765-3353
Owner Representative	Rhonda Lewis, PE	763-765-3352

POST CONSTRUCTION - MAINTENANCE OF BMP's

The Sherburne County Public Works, Maintenance Department, and Haven Township is responsible for the maintenance of the BMP's after the "Notice of Termination" to the MPCA has been submitted.

SOILS

Soil type for the project site are on file with the Sherburne County Public Works Department, with soil borings logs found in the Special Provisions.

DRAINAGE COMPUTATIONS

Computations are kept on file with the Sherburne County Public Works Department.

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	TITLE	LOCATION
Erosion Control Details	Details	Sheets 3-7
Final Restoration	Erosion Control/ Final Restoration	Sheet 11

TIMING OF EROSION CONTROL

All BMP's will be installed prior to the striping or disturbing of topsoil. Riprap, filter blanket, and sod, if indicated on plans, will be placed at the outlets within 24 hours of the outlet placement. Storm Drain Inlet Protection will be installed within 24 hours after the structure has been installed. Culvert Protection will be installed within 24 hours after the culvert has been placed. Street Sweeping will be done as needed throughout the project as directed by the engineer. The contractor shall utilize a pick up type sweeper. All exposed soils must be stabilized within 14 days after construction activity has temporarily or permanently ceased. Rapid Stabilization shall be place on all exposed soils within 200 lineal feet of a surface water and must be stabilized within 24 hours. The contractor is responsible to maintain all disturbed areas until final vegetation is established. Once vegetation is established and construction is complete, all BMP's and any other temporary erosion control that is not biodegradable will be removed.

EROSION AND SEDIMENT CONTROL SUPERVISOR (ECSC)

In accordance with Spec. 3573, the contractor will provide a certified erosion and sediment control supervisor (escs) in good standing who is knowledgeable and experienced in the application of erosion prevention and sediment control best management practices. Payment for the erosion control supervisor is included as part of the lump sum erosion control pay item.

CERTIFIED BMP INSTALLER(S)

in accordance with Spec. 2573, the contractor will provide a minimum of one certified installer per work crew at the time of bmp placement. The installer is responsible for ensuring that all BMPs and erosion and sediment control materials are place correctly in the field. The installer shall notify the ECSC of any grading deficiency that will interfere with BMP performance prior to installing the BMP.

EROSION AND SEDIMENT CONTROL BMP INSPECTIONS

The erosion control supervisor is responsible for complying with all the inspection and maintenance requirements stated in the NPDES permit part IV. F. Inspections of the entire construction site will occur a minimum of once every seven days during active construction and within 24 hours after a rainfall event greater then 0.5 inches in 24 hours. The erosion control supervisory will thoroughly inspect all erosion prevention and sediment control BMPs to ensure integrity and effectiveness of each BMP. Data from the automated turbidity monitoring equipment will be compiled and reviewed as part of the erosion and sediment control BMP inspections. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the SWPPP. Inspection reports must be submitted to the project engineer in a format that meets or exceeds the project engineers expectation. Records of each inspection and maintenance activity shall include:

- A. Date and time of inspections;
- B. Name of persons conducting inspections;
- C. Findings of inspections, including recommendations for corrective actions;
- D. Corrective actions taken including dates, times, and party completing maintenance activities;
- E. Date and amount of all rainfall events greater than 0.5 inch in 24 hours;
- F. Documents and changes made tot he SWPPP.

SWPPP CONSTRUCTION NOTES

Construction phase pollutant sources anticipated at the site are disturbed soils, vehicle fuels and lubricants, chemicals associated with construction activities, and construction generated litter and debris. Without adequate control there is potential for each type of pollutant to be transported by storm water.

CONSTRUCTION PHASING

Phase 1- Erosion Control - The contractor shall install silt fence and silt curtain prior to clearing and grubbing, and the removal of the bridge.

Phase 2- Bridge Removal - The contractor will be removal all debris from the water way including foundations.

Phase 3 - Final Restoration - All final restoration shall be completed before the contractor leaves the site. Once the final restoration is placed the contractor can remove erosion control measures.



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 DMK

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
*Rhonda Lewis*  
 Date 3/26/14  
 Lic. No. 24022

**BRIDGE 90706 REMOVAL**  
 STORMWATER POLLUTION PREVENTION PLAN

SAP 071-599-006

SHEET NO. 8 OF 12 SHEETS •

GENERAL SWPPP NOTES FOR CONSTRUCTION ACTIVITY

1. The general contractor is responsible to comply with all aspects of the NPDES construction Stormwater permit at all times until the notice of termination (NOT) has been filed with the MPCA. The contractor shall develop a chain of command with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until the construction project is complete, the entire site has undergone final stabilization, and a notice of termination (NOT) has been submitted to the MPCA.
2. The contractor shall prepare and submit a site plan for the engineers approval as per MnDOT Spec. 1717.2E for work in environmentally sensitive areas, areas identified in the plans as "site plan requirement area," and any work that will require dewatering. All site plans must be submitted to the engineer in writing. The contractor shall allow a minimum of 7 days for Sherburne County to review and approve site plan submittals. The contractor will not be allowed to commence work for which a site plan is required until approval has been granted by the engineer. The contractor will not be given any extra time in the contract due to the untimely submittal of a site plan.
3. The contractor shall comply with the requirements regarding pollution prevention management during construction, which will include, but not limited to, providing:
  - A. Concrete washout areas for use by all subcontractors and MnDOT personnel. Location of washout areas must be identified by signage and must be at least 200' from site plan requirement areas or environmentally sensitive areas, and utilize a leak-proof containment facility or impermeable liner that prevents runoff onto adjacent soils. An engineered collection system can also be used if it is approved by the project engineer.
  - B. Solid waste collection and removal
  - C. Secondary containment
  - D. Chemical spill kits
4. Chemicals must be kept in a secure storage area when not in use. Chemical storage containers must have secondary containment when being used or stored on the project site. Chemical spills of any kind (oil, fuel, fertilizer, etc.) must be cleaned up and removed from the site immediately. The contractor must have a spill kit on site at each work location at all times.
5. The contractor is responsible for creating and following a written disposal plan for all waste materials. The plan will include how the material will be disposed of and the location of the disposal site. The disposal plan must be submitted to the engineer prior to disposal of any waste materials and prior to changing disposal sites.
6. Burning of any material is not allowed within project boundary.
7. The erosion prevention and sediment control BMPs shall be installed as necessary to minimize erosion from disturbed surfaces and capture sediment on site. All erosion control measures shall be in place prior to any removal work and/or ground disturbing activities commence and shall be maintained until the potential for erosion has been eliminated.
8. Sediment control devices must be established on all down gradient perimeters before any up gradient land disturbing activities begin. Sediment control devices include, but are not limited to:
  - A. Perimeter control shall be located on the contour to capture overland, low-velocity sheet flows down gradient of all exposed soils and prior to discharging to surface waters with the BMP J-hooked at a maximum of 100 foot intervals and shall contain no more than 1/4 acre of drainage area.
  - B. Ditch checks will be placed as necessary to slow down ditch flow during all phases of construction.
    1. Temporary ditch checks will consist of using rock ditch checks, biologs and rock weepers in front of culvert inlets. In lieu of removing temporary ditch checks, the rock may be pushed into the ground.
    2. Filter logs will be placed during permanent turf establishment at the intervals identified in the plan.
  - C. Sediment damage from stockpiles will be minimized by placing a row of silt fence a minimum 5 feet from the toe. If there is not adequate project area to place the silt fence more than 5 feet from the toe of the slope the contractor may submit an alternative for approval by the project engineer.
9. The contractor shall place construction exits, as necessary, to prevent tracking of sediment onto paved surfaces and in compliance with Part IV of the NPDES permit. Construction exits will be sufficiently sized and maintained to prevent track out. Type 5 mulch (Slash mulch) or an approved engineered product will be allowed for construction exits in lieu of crushed rock. Vehicles are prohibited from leaving the project site at any location that is not stabilized by a construction exit or other suitable alternative approved by the project engineer.
10. The contractor must use methods and operational procedures that prevent discharge or placement of bituminous grindings, cuttings, millings, and other bituminous wastes from areas of existing or future vegetated soils. All water conveyance systems (including inlets) and all lanes open to public or construction traffic.
11. Ditches and exposed soils must be kept in an even rough graded condition in order to be able to apply erosion control mulches and blankets.
12. All exposed soil areas must be temporarily or permanently stabilized no more than 7 days after construction activity on that portion of the site has temporarily or permanently ceased for areas that are draining to County Ditch 29 and 14 days for all other areas. In many instances, this will require stabilization to occur more than once during rough grading. The temporary stabilization methods as shown on the temporary erosion control plans will be used to provide temporary cover in these areas as appropriate.
13. All topsoil berms shall be stabilized with Type 1 Mulch, if contractor is delayed beyond the 14 day seeding guidelines.
14. The contractor shall comply with the following inspections and maintenance requirements:
  - A. Silt fence must be repaired, replaced or supplemented when it becomes non-functional or sediment reaches 1/3 the height of the silt fence. Repairs must be made within 24 hours of discovery
  - B. Inlet protection devices should be repaired when they become non-functional or sediment reaches 1/3 the height and/or depth of the device
  - C. Temporary sediment basin must have the sediment removed once the sediment has reached 1/2 the storage volume within 72 hours of discovery
  - D. Tracked sediment must be removed within 24 hours of discovery of tracking onto paved surfaces
  - E. All other nonfunctional BMPs must be repaired, replaced or supplemented within 24 hours of discovery
  - F. Contractor is responsible for maintaining all BMPs until work has been completed, site has gone under final stabilization, and the notice of termination has been submitted to the MPCA in accordance with Part II.B.5 of the construction general permit.
15. If sediment deposits in a water of the state, the material must be removed within 7 days.
16. Pavement surfaces shall be swept within 24 hours of discovery of sediment or tracking onto pavement that drains to curb, inlets, ditches or ponds. Pavement shall be lightly wetted prior to sweeping. Sweeping shall be performed as often as necessary to keep pavement clean, or as directed by project engineer.
17. Temporary dewatering activities may be required for the roadway construction and utility work. Therefore it is possible that a permit for the temporary appropriation of waters of the state, non-irrigation from MNDNR will be required for this project. The contractor will be responsible for obtaining this permit. All temporary dewatering shall be discharged to an approved location for treatment prior to discharge to the receiving water. The contractor is required to submit site plans to Sherburne County Engineer for approval prior to commencing work according to Spec 1717.2E.



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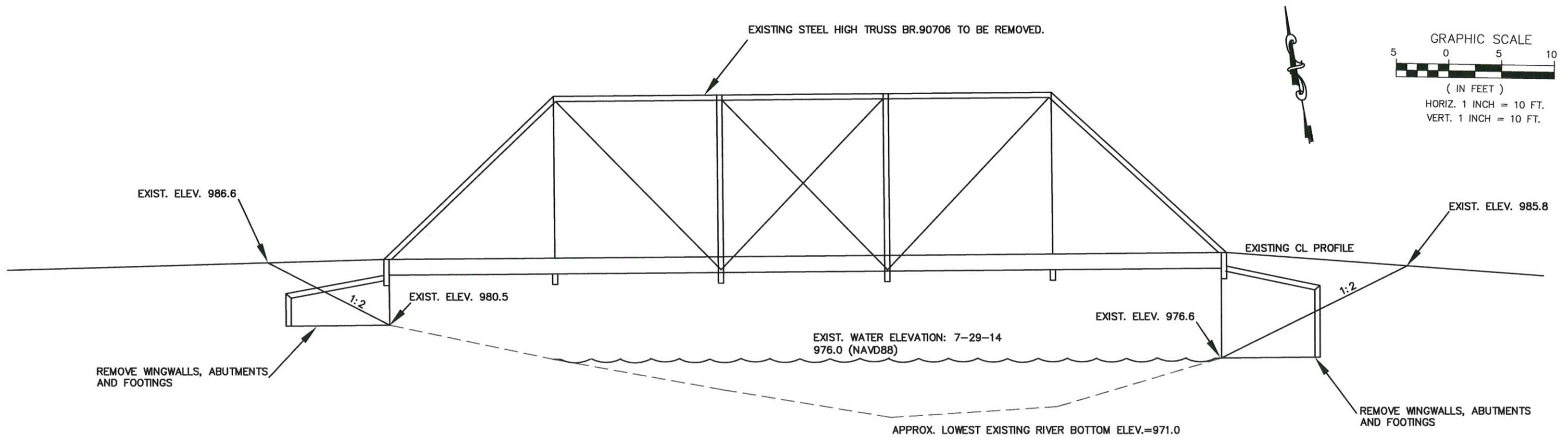
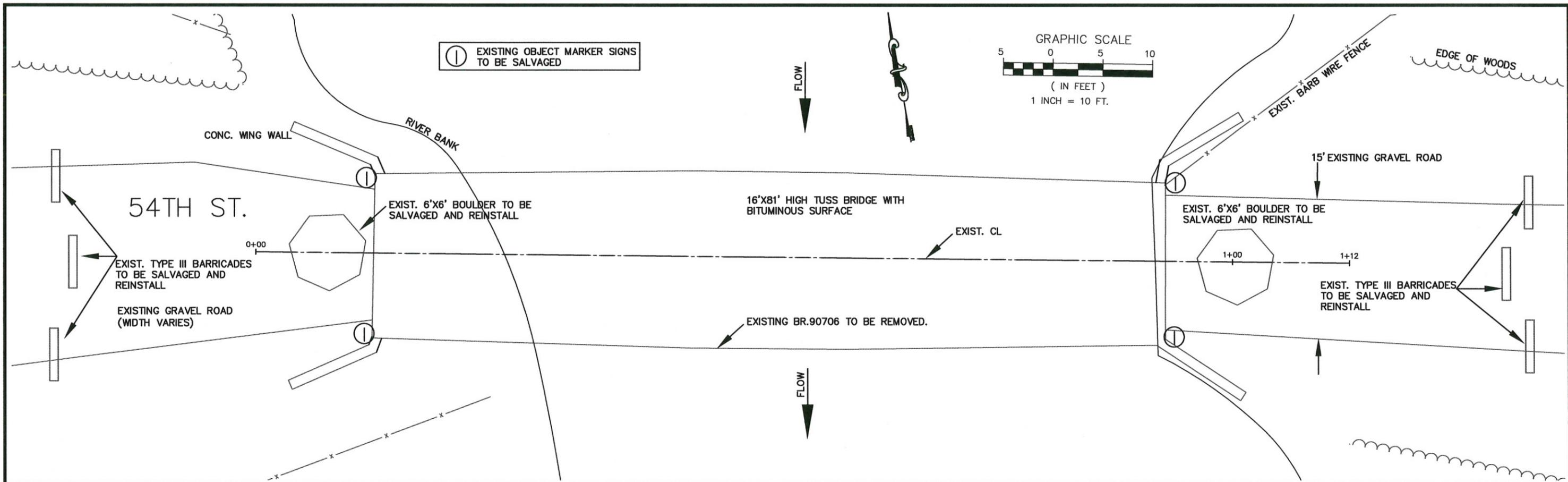
DATE	REVISION

DESIGN BY:	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
MLS	
CHECKED BY:	
DMK	Date: 8/26/14 Lic. No. 24022

BRIDGE 90706 REMOVAL  
STORMWATER POLLUTION PREVENTION PLAN

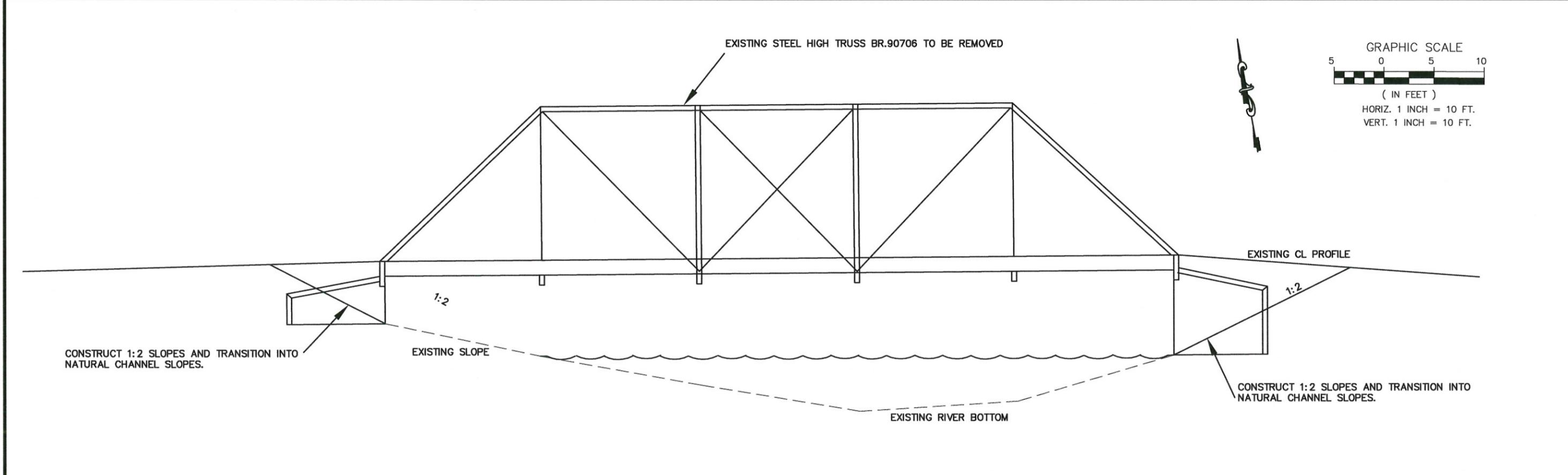
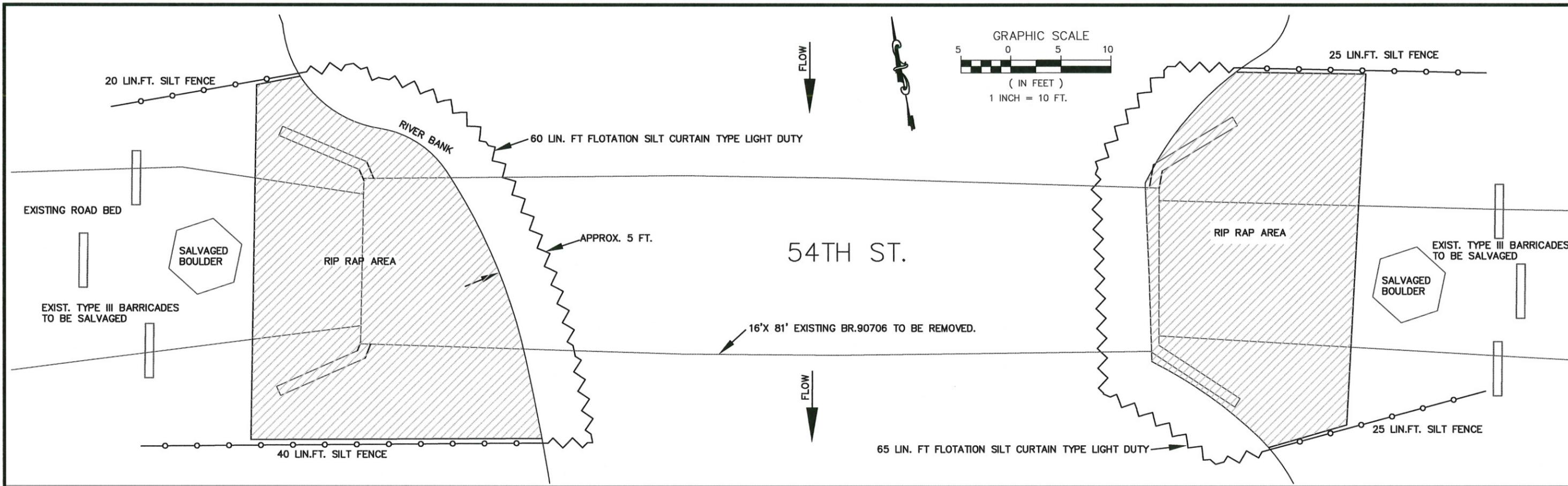
SAP 071-599-006

SHEET NO. 9 OF 12 SHEETS



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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
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*Charles J. Lewis*  
Date: 3/26/14  
Lic. No. 24022



HORIZ. SCALE=1"=100'

EXISTING BR.90706 TO BE REMOVED.

54TH ST.

APPOX. 66' R/W

EXISTING RIVER CHANNEL PER 2010 AERIAL PHOTO

**SHERBURNE COUNTY PUBLIC WORKS**  
 425 JACKSON AVE. ELK RIVER, MINNESOTA 55330  
 Phone (763) 241-7031

DATE	REVISION

DESIGN BY: MLS  
 CHECKED BY: *Shawn J. Lewis* Date: 8/26/14  
 DMK Lic. No. 24022

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

**BRIDGE 90706 REMOVAL**  
 AERIAL VIEW